Fig.1

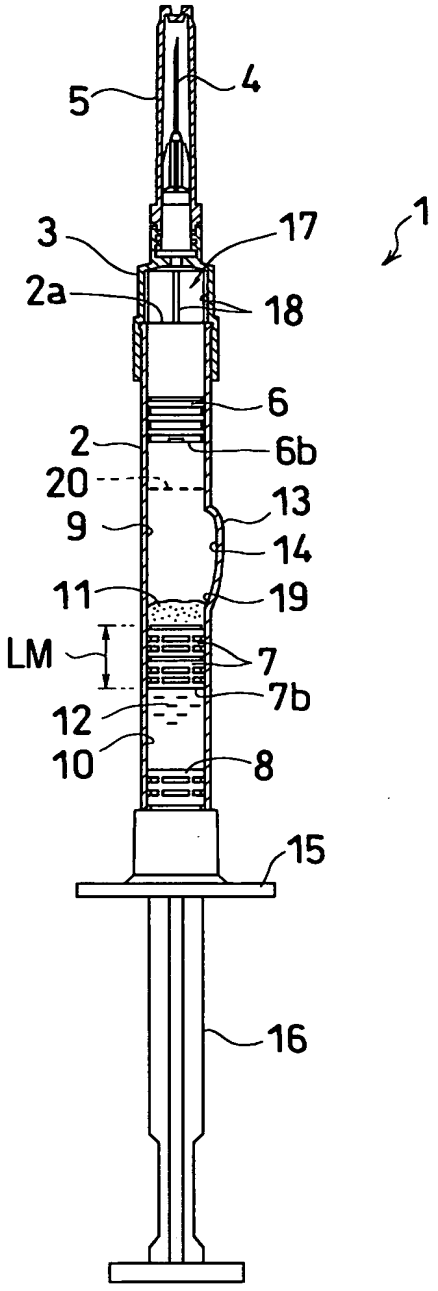

Fig.2

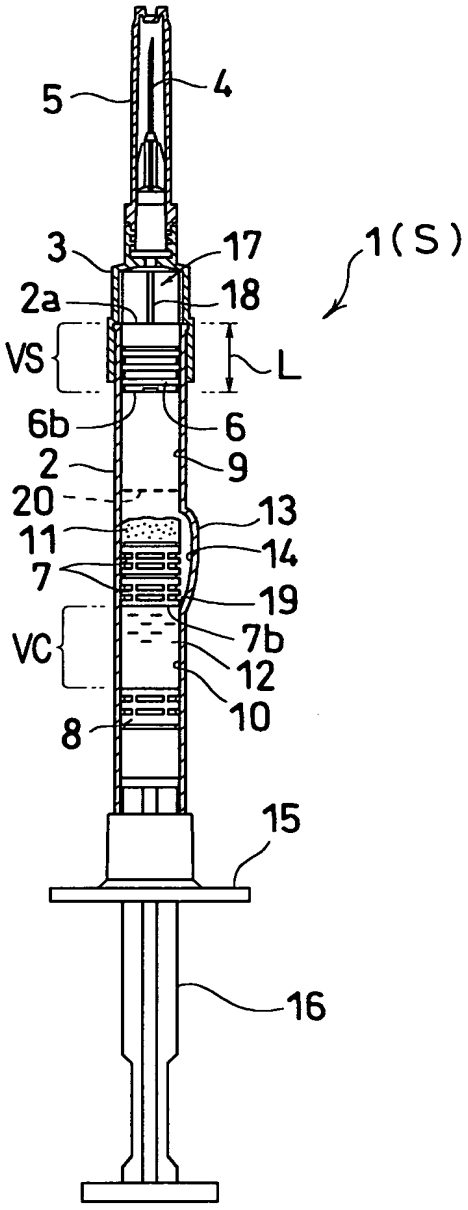

Fig.3

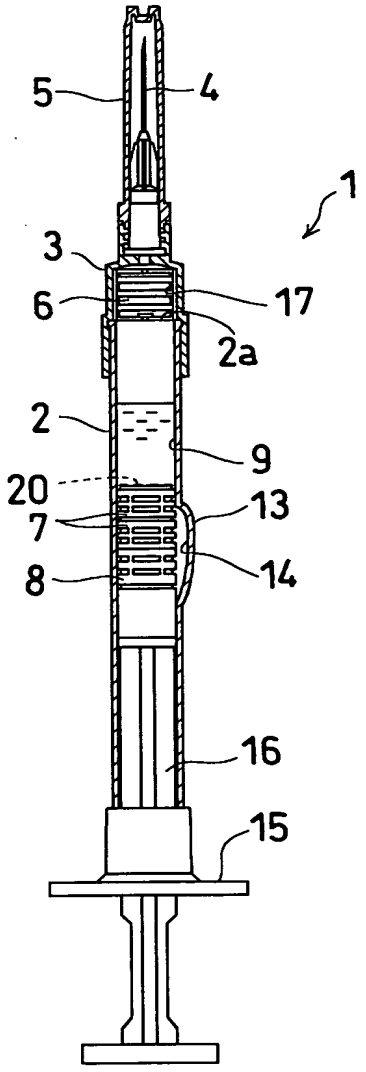

Fig. 4

COMPARISON TABLE 1 : SHOWING BEHAVIOR OF SECOND COMPONENT WHEN CHANGING POSITION FOR ATTACHING FRONT PLUG MEMBER

	CYLINDRICAL BODY		STATE BEFORE PREPARING OPERATION FOR ADMINISTRATION	MOVING DISTANCE TO BEGINNING STATE OF LIQUID TRANSFER		BEGINNING STATE OF LIQUID TRANSFER			VOLUME RATIO	LIQUID SPLASHING-OUT PHENOMENON	
										MOVING SPEED OF END PLUG MEMBER	
	INNER DIAMETER (mm)	LENGTH (mm)	DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG MEMBER (mm)	END PLUG MEMBER (mm)	FRONT PLUG MEMBER (mm)	DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG MEMBER (mm)	REFERENCE VOLUME (mL)	VOLUME OF SECOND COMPONENT (mL)	(%)	7mm/sec	20mm/sec
EXAMPLE 1	10.5	95	22	17	12	10	0.87	1.10	79	◎	◎
EXAMPLE 2	10.5	95	27	17	14	13	1.13	1.10	102	◎	◎
COMPARISON EXAMPLE 1	10.5	95	17	17	13	4	0.35	1.10	31	◎	×
EXAMPLE 3	10.5	90	22	17	14	8	0.69	1.10	63	◎	○
EXAMPLE 4	10.5	90	27	17	15	12	1.04	1.10	94	◎	◎
COMPARISON EXAMPLE 2	10.5	90	17	17	12	5	0.43	1.10	39	◎	×
EXAMPLE 5	14.0	106	22	20	12	10	1.54	1.65	93	◎	◎
EXAMPLE 6	14.0	106	27	20	15	12	1.85	1.65	112	◎	◎
COMPARISON EXAMPLE 3	14.0	106	17	20	16	1	0.15	1.65	9	◎	×

EXPLANATION OF SYMBOLS
◎ : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 0%
○ : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 10%
× : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT AT LEAST 30%

Fig.5

COMPARISON TABLE 2 : SHOWING BEHAVIOR OF SECOND COMPONENT WHEN CHANGING POSITION WHERE BYPASS IS FORMED AND ENTIRE LENGTH OF MIDDLE PLUG MEMBER

	CYLINDRICAL BODY		POSITION WHERE BYPASS IS FORMED	MIDDLE PLUG MEMBER	STATE BEFORE PREPARING OPERATION FOR ADMINISTRATION	MOVING DIATANCE TO BEGINNING STATE OF LIQUID TRANSFER		BEGINNING STATE OF LIQUID TRANSFER				LIQUID SPLASHING-OUT PHENOMENON	
	INNER DIAMETER (mm)	LENGTH (mm)	DISTANCE BETWEEN REAR END PORTION AND LEADING END OF CYLINDRICAL BODY (mm)	ENTIRE LENGTH (mm)	DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG MEMBER (mm)	END PLUG MEMBER (mm)	FRONT PLUG MEMBER (mm)	DISTANCE BETWEEN LEADING END OF CYLINDRICAL BODY AND REAR END OF FRONT PLUG MEMBER (mm)	REFERENCE VOLUME (mL)	VOLUME OF SECOND COMPONENT (mL)	VOLUME RATIO (%)	MOVING SPEED OF END PLUG MEMBER	
												7mm/sec	20mm/sec
EXAMPLE 3	10.5	90	49	12.0	22	17	14	8	0.69	1.10	63	◎	○
EXAMPLE 7	10.5	90	52	10.5	22	12	9	13	1.13	1.10	102	◎	◎
EXAMPLE 8	10.5	90	54	9.0	17	10	4	13	1.13	1.10	102	◎	◎
COMPARISON EXAMPLE 2	10.5	90	49	12.0	17	17	12	5	0.43	1.10	39	◎	×

EXPLANATION OF SYMBOLS
◎ : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 0%
○ : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT 10%
× : PERCENTAGE OF OCCURRENCE OF LIQUID SPLASHING-OUT AT LEAST 30%

Fig. 6